

**E-commerce and Directions in Electronic Filing**  
**Phil Brand**  
**KPMG LLP**  
**Washington National Tax**

***Introduction***

The use of the Internet and e-commerce has exploded within the past five years. Additionally, the rate of that growth is accelerating. This growth, continued advances in technology, the lowering of the cost of hardware and connectivity ensures that over the next decade use of the Internet will continue to explode. This growth, as with any major change, creates both challenges and opportunities for the private sector. It also requires tax and other government regulatory and enforcement agencies to grapple with new issues to prevent growth in non-compliance. Importantly, the web, and related technology gives government the opportunity to fundamentally and for the better, alter its relationships with its citizens. Citizens in many states and at the federal level now file their tax returns electronically, pay taxes and receive refunds, seek information, assistance and advice in an electronic environment. The possibilities seem limitless as three-way partnerships between citizens/consumers, government and the private sector create new ways to use cyberspace.

**A. *The Growth of E-commerce***

- The growth in use of the Internet, the backbone of e-commerce, has been phenomenal over the past few years. The US Congress established a working group on electronic commerce in 1998 to study e-commerce and to provide Congress with information relative to its size, growth and potential. The First Annual Report of the United States Working Group on Electronic Commerce issued in 1999, stated “that fewer than 10 million people were using the Internet in 1995, and that more than 140 million people worldwide were using the Internet in 1998. The same report concluded that more than 1 billion people worldwide will be using the Internet in the first decade of the next century.”<sup>1</sup>
- The Working Group’s report was referenced in a concurrent resolution introduced in the US House of Representatives in September, 1999 that urged the President to seek a global consensus to a ban on tariffs and some forms of taxation on electronic commerce and the Internet. The concurrent resolution also stated that “by the year 2006, more than one-half of the US workforce is expected to be employed in industries that are either major producers or intensive users of information technology products and services. Electronic commerce among businesses is expected to grow to

---

<sup>1</sup> 106<sup>th</sup> Congress, House Concurrent Resolution 190, Sept. 30, 1999.

\$1.3 trillion dollars from the current level of just under \$45 billion.”

- The growth is not confined to business. In fact, 70 percent of Internet access currently originates from the home.<sup>2</sup> Today’s students, many of whom are required to have laptops, as part of their school supplies, will fuel the increased usage as they move into adulthood.
- Importantly, the adoption of the Internet for business has not been confined to the private sector. Government agencies (IRS, SSA, White House, State Tax Agencies) have led the way in establishing web sites for information dissemination, electronic filing and payment of taxes, on-line vehicle registration and a host of other services.

***B. E-commerce Changes the Way Business and Government is Conducted***

- While the growth of the Internet and e-commerce is astounding, so are the fundamental changes underway in how and where business is conducted. While local merchants in small cities fear the arrival of huge mega-stores, the next threat has already developed...the virtual store.
- Banking can now be done on-line with virtual banks that have no physical locations, offer no live teller services, and have no safe deposit vaults. Gamblers no longer have to go to Las Vegas or a local Indian gaming facility...its on-line, complete with electronic payments and payoffs. We now invest in the stock market, take accredited college courses, and play inter-active golf games from home.
- We routinely use ATMs, on-line travel reservations, file our tax returns, receive our refunds, purchase our tickets to entertainment and enjoy on-line entertainment through the net. These changes in how business is conducted have impact. For example, in October of 1999 for a second time within a year, major airlines announced a reduction in the fees paid to travel agents. The increase in on-line reservations was cited as a major reason that airlines feel they may not be dependent on travel agents in the future.<sup>3</sup>
- Radio and TV stations are no longer confined to a set broadcast area, music and entertainment are now available on demand and as long as you have access to the Internet your hometown newspaper and radio station broadcast are a click away no matter where you travel.
- The Internet is also helping form a global community. According to figures released by Cisco Systems and the United Nations Development Program, the KPMG built

---

<sup>2</sup> IntelliQuest Information Group, 1999

<sup>3</sup> “Cuts in Commissions Sting Travel Agents,” The Wall Street Journal, Oct. 12, 1999

## kpmg LLP

Web site <http://www.netaid.org> / established in support of the Oct 9th, 1999 NetAid concerts to highlight world hunger, registered over 40 million hits from people in 160 countries.<sup>4</sup>

- The Internet has also provided government agencies at all levels with the opportunity to inform, educate and conduct business. Specifically, in the area of tax administration, the trends reflect a move from a primary emphasis on electronic filing, refunds/payment and taxpayer information to broader uses of e-commerce. On line account problem resolution, access to account information, transcripts and verification of fact of filing are now increasingly available. Citizens can routinely access and download forms, regulations, and news releases. Increasingly, electronic tax administration no longer simply means filing tax returns.
- The trend is not confined to the United States. As of Oct 22nd, 1999 the Australian Tax Office (ATO) with a filing date for personal income tax returns of Oct 31, 1999 had received just about 6.8 million returns. 4.1 million were filed using the Electronic Lodging System (ELS).<sup>5</sup> The ATO also maintains an excellent Web page for its citizens at <http://www.ato.gov.au/> that explains ELS. A similar web site is maintained by Inland Revenue in New Zealand ( Te Tari Taake) at <http://www.govt.nz/>.
- Importantly, both businesses and government are now moving beyond simply sharing information to the next stage of e-commerce. They are establishing interactive sites where products, and services can be ordered, frequently downloaded and even used on-line. This trend makes possible the virtual store and virtual government. offices.

### ***C. The Basics of E-commerce Applications***

- The trend from simply providing information to offering interactive services is considered by KPMG's electronic commerce consultants to be one key competitive advantage. KPMG itself has moved beyond simply offering consulting services relative to e-commerce, web site development etc., to adopting a more fundamental strategic direction. KPMG has established e-commerce practice leaders within our basic lines of service, tax, assurance and consulting. Their role is to change the way we deliver our professional services in an e-commerce environment. Thus, we are moving to integration of e-commerce into our day to day business practices. One result is the establishment of interactive Internet and Intranet sites that serve clients and employees in very interactive ways.

---

<sup>4</sup> KPMG, INFOTAX, Oct. 1999.

<sup>5</sup> Australian Tax Office, *National Performance Report-Processing 99*, Oct. 29, 1999.

## kpmg LLP

- It is important to think of e-commerce both externally but also internally. This trend consists of offering items such as personnel services, information about benefits, pay and timekeeping records, supply ordering, travel, conference arrangements and training on-line. Such internal products sometimes become external products as their value in the market is recognized.
- Not only can a product or service be “sold” via the net, but much of the supporting activities such as inventory control, loss and shrinkage control, management information, shipping and delivery information, customer complaints and of course business financial and tax data can piggyback off these e-commerce systems.
- Another area that is promising is the ability and desirability of electronic record keeping. The volume of records and the availability to query the resultant databases, provides the opportunity to maintain and use management and financial information in extraordinary ways. This capability can also provide e-commerce through “partnering” between tax administrators and taxpayers to exchange data, speed up interchanges of data relative to tax examinations and reduce and correct errors that cause customers/taxpayers problems.
- A recently publicized IRS pilot project on electronic transcript delivery to an interested third party after taxpayer authorization, moves beyond the approach of e-commerce as simply providing information, and even past the mode of two-way transactions to create three-way transaction between the government, the taxpayer and the private sector. This project also reflects the tension inherent in e-commerce, around the need for privacy, security and controls on the use of the personal data.<sup>6</sup>
- Modification of practices, policies and procedures is an important underpinning of e-commerce. I will discuss this issue as part of the challenges facing tax administrators but it should be noted that in the area of e-filing the IRS and State Tax Agencies have spent enormous energy around the need for a “jurad” (signature) on electronically filed tax returns. Technology is delivering alternatives but this is an excellent example of the need for modification of existing procedures.
- Lastly, linkage is another major element in many successful e-commerce operations. Retailers are able to develop liaisons with other retailers of complementary products...travel, hotels and rental cars. This linkage can be internal to other products and services, for employment opportunities or to external partners.

---

<sup>6</sup> “Barr Discusses Proposal for Electronic Disclosure of Tax Data,” Tax Analysts, Daily Tax Highlights and Documents, Oct. 26, 1999.

***D. Why the Rush to the Web? –Efficiency!***

- Technology properly implemented can reduce employment costs and as importantly allow for a change in the mix and focus of employees to increase profitability. One word of warning, the use of any electronic interchange needs to have some type of built in connection to live assistance.
- Efficiency can also be demonstrated in terms of capacity to store information, ease of tracking transaction trends, sales data and other important management information. The ease of customer contact and product delivery can also reduce costs. Direct mail advertising can be linked with e-commerce ordering. Increasingly, products are being delivered on-line, saving the delivery costs.
- The use of electronic orders and transactions also allows for built in quality control with a corresponding reduction in errors. Supply chain management and the advantages of improved speed, accuracy and forecasting contribute to reduced costs and increased customer service.
- Theoretically all the advantages of business-to-business and customer-to-business electronic transactions also apply to business/individual transactions with government. However, it is important overall to recognize that mandates to use electronic commerce may be viewed differently by taxpayers. Such mandated transactions may result in the actual or perceived shifting of cost from Government to the user. This in turns leads to resistance. This is not necessarily wrong but must be viewed in the context of the client/taxpayer when government plans to expand e-commerce.

***E. Challenges in E-commerce***

- While e-commerce, the Web, on-line access and the blending of the web with entertainment all provide new and exciting opportunities the challenges are many.
- Despite the growth in the use of the Web there are still less users than non-users. Thus, for many businesses and agencies duplicative delivery systems must be maintained.
- Knowledge management is important to ensure a Web Site is not over populated and that the data on it is correct. This becomes a major issue as the volume of information provided expands. What information will be provided and how much will be made available? Who can post comments and answers to issues raised by external customers on the Internet or by employees internally on an Intranet?

- Making the access point visible in the sea of sites and gaining attention for a product or service in the glut of on-line advertising is difficult. The Web may also increase the base of competition. It is a lot more difficult to control information from competitors when customers do the shopping on-line without the need for physical movement to multiple locations.
- Globalization of business as well as a diverse customer base may increase the need for multi-lingual sites and service. Additionally, as the use expands demand increases for more services and access via the Net.
- Speed kills! One of the major attributes of the Internet is the speed with which transactions can be completed. This major attribute does however create difficulty in the prevention and recovery of losses due to erroneous or fraudulent transaction. While there is additional glamour attached to “electronic commerce fraud” in many instances it is not so much the electronic nature of the transaction rather, the speed with which transactions are completed that creates the challenge. Conversely, electronic transactions can be subjected automatically to many more filters and screens and updates in fraud detection methods can usually be implemented rapidly.

***F. Challenges in E-commerce for Tax Administrators***

- Government agencies and especially tax departments must be especially vigilant to balance access and security. The concerns are multiple, individuals want their privacy protected and their financial transactions handled so that personal data and finances are protected. Businesses share these concerns and also want business data, trade secrets, and strategic plan information protected.
- Taxpayers also want to ensure that safeguards are in place on electronic interactions with tax agencies that restrict government access to only the data they agree to provide the government access to. When the IRS introduced the Electronic Federal Tax Payment System (EFTPS), many taxpayers voiced this concern. This need must be balanced with the increased ease and safety of opening accounts overseas and the ease of transferring money around the worldwide net.
- Modifying practices, procedures and policies to accommodate e-commerce is paramount. In order to take full advantage of the new processes, the authorities of employees may need to be broadened, and the techniques tax agencies use to conduct compliance operations may need to be revised. For example, despite the fact that electronic record storage has been available for some time it wasn't until March of 1997, after years of discussion, that the IRS issued procedures allowing for the destruction of original paper documents underlying the computerized records.<sup>7</sup>

---

<sup>7</sup> Re. Proc. 97-22, 1997-13 IRB 1 (March 13, 1997).

- Additionally tax administrators must deal with the “big brother syndrome.” The ability of government to gather, analyze and use data from its own records as well as the data available from commercial databases gives rise to fears about omnipresent government. This is a strategic issue and a “political consideration” that must be dealt with as tax agencies increase the ability to gather, analyze and exchange data.
- Earlier in this paper I referenced the fact that all of the advantages to e-commerce between private sector entities could apply to transactions between business and government. Some believe otherwise. Writing about electronic funds transfer, Lillian Brown Esq., chair of the American Bar Association’s Employment Taxes subcommittee stated, “while the government gets its money faster and saves time and costs associated with a collective check based system, individual businesses must cope with multiple payment systems, a diminished paper trail and potentially altered legal landscape, along with the advantage of paying a single creditor electronically.”<sup>8</sup> This issue should not be taken lightly as government moves to increase e-commerce.
- There are also a number of compliance concerns that tax administrators must consider. How does a tax agency cope with growing Internet sales, lightning like transfers of money, and a Web without geo-political boundaries? Couple this with technology that allows for masking the actual location of many sites and the potential for non-compliance is huge. According to an article in a recent Tax Analyst edition, a recent IRS study revealed that of 1,600 Web sites studied, 9.5 percent of the beneficial owners could not be identified. An unnamed IRS source was quoted as saying “It is significantly more difficult to identify a taxpayer in the electronic world that in the normal population”<sup>9</sup>

**G. Public and Private Sector Partnerships**

- There has been excellent progress in creating partnerships between government and the private sector in using e-commerce especially in the area of tax administration. Does this portend a trend in the blending of government and private sector capabilities to improve services to taxpayers?
- There has already been a lot of blending. The software industry has made major investments in technology and in the development of tax preparation tools. This includes software that gathers and calculates tax, helps with preplanning, incorporates the latest IRS/State Publications in its electronic packages and then helps file the completed returns electronically. The trend now is a shift from having this software

---

<sup>8</sup> Brown, Lillian E., “*Electronic Fund Transfers: Panacea or Pandora’s Box?*”, Journal of Tax Practice and Procedure, August-September, 1999.

<sup>9</sup> “*IRS Studying E-Commerce Tax Problems*”, Tax Analysts, Daily Tax, Highlights and Documents, Oct. 26, 1999.

on the desktop to simply accessing such packages on the Internet.

- On a longer-term basis, the use of e-file and e-transactions could move the initial processing of tax returns to the private sector. The filing of returns and information electronically through private sector software and portals may eventually mean that the IRS simply gets the data it needs electronically creating the first virtual IRS service centers, and eventually eliminating paper filings.
- Over 12 million individual taxpayers in the US are using tax software, and 200,000 tax professionals use such programs that make tax preparation easier, quicker and more accurate.<sup>10</sup> Other major players in this partnership arena are the payroll service companies that collectively collect and electronically deposit billions of dollars in payroll taxes weekly.

#### ***H. Virtual Government?***

- The e-commerce revolution sets the stage for radical change. Tax administrators must balance the needs of taxpayers with the need to protect our high degree of voluntary compliance. Opportunity and challenges abound as we leverage the use of e-commerce in the private and public sectors.

---

<sup>10</sup> 1999, Federation of Tax Administrators, Technology Conference



# E-commerce & Directions in Electronic Filing



Phil Brand  
National Director, TCS Services  
KPMG LLP  
Washington DC

# The Explosion of E-commerce

- In 1995 10 million people world-wide internet users. Number increased to 140 million in 1998! 1 billion users in the next decade.- *First Annual Report US Gov't Working Group on e-commerce*
- Electronic retail sales at \$8 billion in 1998, to be \$108 billion by 2003.- *Gov't Working Group*
- "In general, the more difficult and time-consuming a purchase category is, the more likely consumers will prefer to use the internet versus standard physical means." *eMarketer*



# The Explosion of E-commerce (Continued)



- Home continues to be the most popular access location, with nearly 70% of users accessing from their homes...almost 60% shop online. The most popular activities include finding information about a service or product's price or features, checking on product selection and determining where to purchase a product.--  
*IntelliQuest Information Group, Inc., WWITS Survey*
- Government Agencies have entered the fray...IRS, SSA, CFTB and other FTA members have outstanding web sites/major increases in e-file & other e-transactions.

# E-commerce and the Conduct of Business & Government

- The explosion isn't just in the growth but is also in the way business and government is conducted.
  - Virtual banks-existing only on the web.
  - Virtual casinos.
  - Tax return filing and electronic payment of taxes.
  - On-line mortgages/consumer lending.
  - Where and when business can be conducted has changed--government agency kiosks for tax information, postal services, drivers licenses and vehicle registration etc.

# E-commerce and the Conduct of Business and Government (Con't)




- ATM machines/debit cards/payment of tax by credit cards
- e-reservations and tickets.
- On-demand printing services--you design it, proof it and the net delivers.
- On-demand grocery shopping.
- On-line services-drivers license and vehicle registration renewals.
- Global community yet ability to focus on the customer.
- Communications---digital TV/Radio--Satellite and Web Broadcasts.

# The Basics of E-commerce Applications

- A product or service to offer.
- A place to sell or promote the product/service i.e., a web site.
- A way to attract consumers to your site.
- A way to accept transactions or orders, online.
- A way to accept payment, commonly via credit card payments or via electronic debit authorization. A secure transactional process and secure connection to the source of payment authorization are required.
- A fulfillment facility for delivering the service, information or the products however many items (software, printing services and information, fulfillment can occur over the Web through a file download mechanism.

# The Basics of E-commerce Applications (Continued)



- An electronic method to accept return items, adjust errors.
- An electronic vehicle to handle warranty claims, if applicable.
- A way to provide product and service customer service support through email, online forms, online knowledge bases, and FAQ's.
- Additionally, other business functions or practices may be integrated into the e-commerce offering. Example, you may want to show the consumer the exact status of an order.


# Why the Rush to the Web?-Efficiency!

- A web-based order form that populates a database of orders can take the place of a customer service representative receiving orders via phone.
- Also, an online consumer may be more apt to buy related merchandise that can be marketed alongside the initial product being purchased.
- Example: In merchandising a single book title, a vendor can show the consumer what other buyers with similar interests purchased in addition to the initial title.



# Why the Rush to the Web?

## Efficiency! (Continued)



- Offering products or services online gives consumers (and vendors) greater options.
- Some consumers prefer to shop online because of the ability to easily research competitive offerings and shop at their leisure without pressure from aggressive sales staff. Establishing a web site can also lure customers from a competitor that does not offer an online service.
- Errors are dramatically reduced through the use of technology.
- Hours of customer access can frequently be expanded at little additional cost.

# Why the Rush to the Web? Efficiency! (Continued)

- Consumers can add to an order over time before actually submitting it to the vendor.
- Online offerings can be dramatically greater than that which could be offered on paper. While a vendor could offer 1,000,000 music titles online, it would be difficult to make the same size collection available through a print publication.
- The vendor is able to set up a process to communicate to a consumer when their order has been received, shipped, and processed via an email message-- it's automatic.
- Ability to establish a single point of entry for inquiries on all products, services and information offered.
- Ease of gathering and analyzing customer trend data through on-line tie-ins with MIS.

# Challenges in E-commerce

- Drawing consumers to your site initially and then getting them to return a second time.
- Differentiating yourself from the competition. Or at least making it interesting!
- Getting consumers to actually purchase or use something from your web site. A large number of hits does not necessarily mean your site is successful.
- An increase in competition, if you are a local retailer competition is no longer only local.
- Integrating an e-commerce web site with existing business data (if applicable).
- Globalization- e-commerce is not bound by geography and its borders are not easily discernible.

# Challenges in E-commerce For Tax Administrators

- Increased need for ease of access coupled with security- for individuals and businesses.
- Identifying and controlling requests for personal/business information, claims for refunds and benefits- balancing access, employee authorities with the right amount of due diligence and controls.
- Modifying practices, policies and procedures to accommodate e-commerce.
- Mitigating the “big brother” fear factor-need for trust, privacy and security.

# Challenges in E-commerce For Tax Administrators (Continued)



- Integrating e-commerce with the rest of the agency functions.
- Procurement constraints and shifting the cost of doing business to the consumer.
- Challenges of Knowledge Management-amount and quality of content .
- Increased customer expectations-for convenient & inexpensive services--more on-line transactions.
- The impact of globalization.
- Impact of e-commerce on tax compliance.

# Public and Private Sector Partnerships

- e-commerce sets stage for dramatic changes in relationships between government agencies private sector businesses.
  - E-file and Fed-State information sharing.
  - Merger of private sector technology and software with government operational needs
  - Ability to offer single gateway for a combination of private sector and government sector services/products and information.
  - Added flexibility of managing workloads through private-government sector partnerships.

# Public and Private Sector Partnerships (Continued)



- e-commerce sets the stage for dramatic changes in relationships between government and its citizens
  - Access 24/7-multiples of information through a single entry point
  - Immediate data on trends issues and concerns
  - Quicker and more error free submissions and government responses
  - Changes in the size, type and location of government facilities and access.
  - Stimulating the creativity of government, private sector and our customers.